ADJUSTMENT AND CREDIT MANUAL
MEMPHIS, TENNESSEE

Table of Contents

Appendix A

Adjustment Forms
Credit Application Forms
Enforcement Forms

Section 1 - Introduction

The City of Memphis established a Storm Water Enterprise Fund effective May 1, 2006. The enterprise fund will provide the City with the authorization to establish and collect just and equitable rates, fees, and charges for the services and facilities provided by the Storm Water Enterprise System. The City is further authorized by Tennessee Statutes to construct, reconstruct, improve, and extend the Storm Water Management System.

The City's Storm Water Enterprise Fund establishes a mechanism for billing the costs of operating and maintaining the City's Storm Water Management System, and financing the necessary repairs, replacements, improvements, and extensions. The City's ordinance provides the mechanisms for billing and payment, accounting for capital contributions, and establishing the Storm Water Enterprise Fund. This Adjustment and Credit Manual outlines the guidelines under which the City will grant adjustments and credits to storm water user fees. The maximum credits that are available to any one parcel shall be 50%.

This Adjustment and Credit Manual will be reviewed at a minimum of once per year to determine if any changes or corrections should be made.

1.1 Definitions

The following definitions shall apply in the use of this Adjustment and Credit Manual. Words used in the singular shall include the plural, and the plural, the singular; words used in the present tense shall include the future tense. The word "shall" is mandatory and not discretionary. The word "may" is permissive. Words not defined herein shall be construed to have the meaning given by common and ordinary use as defined in the latest edition of Webster's Dictionary.

ACCELERATED WATER EROSION. The wearing away of the land surface by storm water runoff, or snow melt water, occurring at a much more rapid rate than geologic or normal erosion, primarily as a result of denuding the land and/or altering its slope.

ADJUSTMENT. The adjustment of the user fee assessed to a particular parcel based on the more detailed assessment of the impervious area on that parcel.

AGRICULTURAL LANDS. Those lands utilized for any agricultural use, including forestry.

APPEAL. The process of filing a dispute with the fee determination, fee adjustment or fee credit as recognized by the City.

APPLICANT. Any person, or a duly designated representative applying for a permit or other type of city, federal, or state regulatory approval to proceed with a project.

APPROVING AGENCY. The approving agency shall be the Storm Water Enterprise Fund.

AQUIFER. An underground formation, group of formations, or part of a formation that is permeable enough to transmit, store, or yield usable quantities of water.

AS-BUILT PLANS. The final plans amended to include all locations, dimensions, elevations, capacities, features and capabilities, as actually constructed and installed.

CHANNEL. A natural stream that conveys water. A ditch, or passageway, excavated to permit or accommodate the flow of water.

CITY. City of Memphis, Tennessee and its authorized agents.

CITY ENGINEER. A professional engineer designated by and representing the City of Memphis, Tennessee or such engineer's authorized designee.

CITY OF MEMPHIS AND SHELBY COUNTY STORM WATER MANAGEMENT MANUAL. The technical and policy manuals, plans, regulations and/or calculations, and any subsequent updates or amendments thereto, used by the City Engineer to administer the storm water regulations.

CLEARING. The removal of trees, brush, and other ground cover from all or a part of a tract of land, but shall not include mowing.

COMPENSATING STORAGE. Equivalent floodplain storage provided to counterbalance floodplain filling.

CONCENTRATED STORM RUNOFF. Surface runoff that converges and flows primarily through water conveyance features such as swales, gullies, waterways, channels, or storm drains and which exceeds the maximum specified flow rates of filters or perimeter controls intended to produce or control sheet flow.

COUNCIL. The City Council of Memphis, Tennessee.

COUNTY. Shelby County, Tennessee and its authorized agents.

CREDIT. The reduction in fee associated with the demonstration by a nonresidential customer or private property POA that their existing or proposed storm water facilities provide the City with a savings of cost or other identified benefit that the City would otherwise incur as part of their efforts to manage storm water.

CUSTOMER. The owner of any parcel that is charged a Storm Water Enterprise Fund fee from Memphis, Tennessee.

DETENTION or TO DETAIN. The prevention of, or to prevent, the discharge, directly or indirectly, of a given volume of storm water runoff into surface waters or pipe networks by providing temporary on-site storage.

DEVELOPMENT or DEVELOPMENT ACTIVITY. The alteration, construction, installation, demolition or removal of a structure, impervious surface, pipe, conduit, cable or line, above or below ground, or the clearing, scraping, grubbing, killing or otherwise removing the vegetation from a site; or adding, removing, exposing, excavating, leveling, grading, digging, burrowing, dumping, piling, dredging or otherwise significantly disturbing the soil, mud, sand or rock of a site.

DIRECTLY CONNECTED IMPERVIOUS AREAS. Those impervious areas which are directly connected to the City's drainage system by a ditch, storm drain, channel, or other man-made device for the conveyance of storm water runoff.

DIRECTOR. The Director of the Division of Public Works or designee.

DISCHARGE. The flow of water from a project, site, aquifer, drainage basin, or other drainage facility.

DITCH. An artificial waterway for the purpose of irrigation or for storm water conveyance.

DRAINAGE FACILITY. Any physical component of a storm water management system.

DRAINAGE SYSTEM. All facilities used for the movement of storm water through and from a drainage area including, but not limited to, any and all of the following:

- conduits, pipes and culverts, including appurtenant features such as catch basins, inlets, manholes, and headwalls,
- channels, ditches, flumes, curbs, streets and other paved areas, and
- all watercourses, standing or flowing bodies of water, and wetlands.

While some such facilities may be isolated in a given storm event, all are interconnected in a given drainage system for a storm event exceeding a certain magnitude.

DWELLING UNIT. Any building or portion thereof designed or used exclusively as the residence or sleeping place of one or more families, but not including a tent, cabin, trailer or trailer coach, boarding or rooming house, or hotel.

EASEMENT. A grant by a property owner for a specified use of all or a specified portion of land to a person or the public at large.

EROSION. The wearing or washing away of soil by the action of water.

FACILITIES. Various drainage works that may include inlets, conduits, manholes, energy dissipation structures, channels, outlets, retention/detention basins, and other structural components.

FEMA. Federal Emergency Management Agency.

FREEBOARD. The space from the top of an embankment to the highest water elevation expected for the largest design storm stored. The space is often required as a safety margin in a pond or detention basin.

FREQUENCY YEAR STORM. A rainfall event expressed as an exceedence probability with a specified chance of being equaled or exceeded in any given year, as follows:

One Year.....100 percent
Two Year..... 50 percent
Ten Year..... 10 percent
Twenty-Five Year..... 4 percent
Fifty Year..... 2 percent
One-Hundred Year..... 1 percent

GROUNDWATER. Water below the surface of the ground, in known or defined natural channels, whether flowing or not.

HYDROGRAPH. A graph of inflow and/or discharge versus time for a selected point in the drainage system.

IMPERVIOUS SURFACE. A surface which has been compacted or covered with a layer of material so that it is resistant to infiltration by water, including semi-pervious surfaces such as compacted clay, most conventionally surfaced streets, roofs, sidewalks, parking lots, and other similar surfaces.

INSPECTOR. A person designated by the Director of Public Works who conducts the necessary inspection of storm water related work to ensure conformance with the approved plan and the provisions of this chapter.

INTENSITY. The depth of accumulated rainfall per unit of time.

MAINTENANCE. The action taken to protect, preserve, or restore the as-built, functionality of any facility or system.

NONRESIDENTIAL DEVELOPED PROPERTY. Any property developed for commercial, industrial, governmental, or institutional use, including churches, hospitals, and other not for profit institutions and including multiuse properties incorporating residential uses, but excluding undeveloped property, golf courses, nurseries, and property used exclusively for agricultural purposes.

NOTICE. A written or printed communication conveying information or warning.

OPEN CHANNEL. An uncovered ditch, channel, or swale used to convey storm water runoff.

OWNER. The person in whom the fee, ownership, dominion, or title of property (i.e., the proprietor) is vested. This term may also include a tenant, if chargeable under his lease for the maintenance of the property, and any agent of the owner or tenant including a developer.

PARCEL or PARCEL OF LAND. A tract, or contiguous tracts, of land in the possession of, owned by, or recorded as property of the same claimant person as of the effective date of the Storm Water Ordinance establishing the storm water fee.

PEAK RATE OF FLOW. The maximum rate of discharge resulting from a given storm event.

PERMITTEE. Any person who has been granted a permit to proceed with a project.

PERSON. Any individual, firm, corporation, governmental agency, business trust, estate, trust, partnership, association, two or more persons having a joint or common business interest, or any other legal entity.

POA (PROPERTY OWNER'S ASSOCIATION). The legally recognized group or organization representing the interest of the property owners within a specified jurisdiction.

POSITIVE OUTLET. A gravity discharge from a basin via overland flow, artificial waterway, natural waterway, or pipe.

POST-DEVELOPMENT. The hydrologic and hydraulic condition of a project site immediately following completion of the development for which a permit has been approved.

PRE-DEVELOPMENT. The hydrologic and hydraulic condition of a project site immediately before development or construction begins.

PRIVATE. Property or facilities owned by individuals, firms, entities, corporations, and other organizations and not by local, state or federal governments.

PROFESSIONAL ENGINEER. A professional engineer licensed by the State of Tennessee, skilled in the practice of civil engineering and the engineer of record for the project under consideration.

PUBLIC. Property or facilities owned by local, state or federal governments.

RAINFALL INTENSITY. The depth of accumulated rainfall per unit of time.

RATE. Volume of water, or other material, moved per unit of time.

RECEIVING WATERS or WATER BODY. Any water body, watercourse, or wetland into which storm water run-off flows.

RETENTION or TO RETAIN. The prevention of, or to prevent, the discharge, directly or indirectly, of a given volume of storm water runoff into surface waters or pipe networks by complete on-site storage.

SEDIMENT. Solid material, whether mineral or organic, that is in suspension, is being transported, or has been moved from its place of origin by water.

SEDIMENT CONTROL DEVICE. Any structure or area that is designed to hold runoff water until suspended sediment has settled out or other device(s) intended to remove sediment or particulates.

SINGLE FAMILY DETACHED UNIT (SFU). The statistical average estimated to be 3,147 square feet of horizontal impervious area for each single family detached residential dwelling unit within the City and as established by Ordinance. The horizontal impervious area includes, but is not limited to, all areas covered by structures, roof extensions, patios, porches, driveways, and sidewalks.

SITE. Any tract, lot, or parcel of land or contiguous combination of tracts, lots, or parcels of land that is in one ownership, or contiguous and in diverse ownership, where development is to be performed as part of a planned development, subdivision, or projects.

SITE STORM WATER MANAGEMENT PLAN. Refers to the state/county/city approved detailed analysis, design, and drawings of the storm water management system required for all construction.

STORM EVENT. A storm of a specific duration, intensity, and frequency.

STORM WATER OR RUNOFF. Refers to the flow of water which results from, and which occurs during and following a rainfall event.

STORM WATER DESIGN STANDARDS. The design standards presented in the City of Memphis and Shelby County Storm Water Management Manual, and such other standards that may be adopted by the City from time to time.

STORM WATER MANAGEMENT SYSTEM OR FACILITIES. Refers to the existing, designed, and/or constructed features which collect, convey, channel, store, inhibit, or divert the movement of storm water.

STRUCTURE. Anything constructed or installed with a fixed location on or in the ground.

SUBGRADE. The top elevation of graded and compacted earth underlying roadway pavement.

SWALE. An artificial or natural waterway, which may contain contiguous areas of standing or flowing water following a rainfall event. A swale may be planted with or otherwise contain vegetation suitable for soil stabilization, storm water re-treatment, and/or nutrient uptake; or may be designed to accommodate or account for soil erodibility, soil percolation, slope, slope length, and contributing area, so as to prevent erosion and reduce the pollutant concentration of any discharge.

TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK (TDEC). This handbook includes all existing Tennessee storm water management regulations required for individuals to submit a erosion control and sediment reduction permit application to the Department of Environment and Conservation.

VACANT LAND. A lot or parcel of land that is without any building, structure or improvement, including impervious surfaces, but does not include recreation, green or open space created around private or public facilities nor parcels connected or contiguous thereto for the same or similar uses.

WATER BODY. Any natural or artificial pond, lake, reservoir, or other area that ordinarily or intermittently contains water, and which has a discernible shoreline.

WATERCOURSE. Any natural or artificial stream, creek, channel, ditch, canal, waterway, gully, ravine, or wash in which water flows either continuously or intermittently, and which has a definite channel, bed, or banks.

WATER QUALITY. Those characteristics of storm water runoff from a land disturbing activity that relate to the physical, chemical, biological or radiological integrity of water.

WATER QUANTITY. Those characteristics of storm water runoff that relate to the rate and volume of the storm water runoff to downstream areas resulting from land disturbing activities.

WATERSHED. Drainage area contributing storm water runoff to a single point.

WET RETENTION. A detention basin that contains a permanent pool of water that will retain runoff for a minimum period of 14 days for an average summer rainfall, and which has a littoral zone over a substantial portion of the pond surface area.

WETLAND. An area that is inundated or saturated by surface or groundwater with a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

WORKS. All artificial, man made structures, including, but not limited to, canals, ditches, swales, conduits, channels, culverts, pipes, and other construction that connects to, draws water from, drains water into, or is placed in or across the waters of the state.

Section 2 – User Fee Adjustment and Credits

The following procedures address both adjustments and credits for storm water user fees. The City grants user fee adjustments when customers identify incorrect information contained in the City's billing database. Adjustments typically occur when the City has incorrectly delineated the impervious area within a nonresidential property, or when residential customers are assigned the incorrect percentage of SFU rate per dwelling unit for their residential type.

User fee credits are associated with the construction, operation, and maintenance of privately owned storm water facilities that provide beneficial use to the City. Both residential and nonresidential customers can qualify for user fee adjustments; whereas only nonresidential customers and private Property Owner's Associations (POAs) qualify for user fee credits. **Appendix A** contains Storm Water Management Forms that are used as part of the adjustment and credit policy.

The Director of Public Works, or designee, will review adjustment and credit requests made during the first fourteen (14) months during which the storm water user fee is imposed and at any time when a customer submits a new request due to the implementation of a change to their existing storm water facilities. These requests will be reviewed within a 6-month period from the date of filing of the request. Storm water fee changes resulting from such requests shall be entirely retroactive for the first fourteen (14) months of the storm water enterprise fund's implementation; however, all subsequent evaluations after the first fourteen (14) months will allow fees to be reduced, upon approval, from the date of implementation of a change to their existing storm water facilities.

2.1 User Fee Adjustments

Requests for adjustment of the storm water user fee shall be submitted to the Director of Public Works' office, which has authority to administer the procedures and standards, and review criteria for the adjustment of fees as established herein. All requests shall be judged on the basis of the amount of impervious area on the site.

The following procedures shall apply to all adjustment requests of the storm water user fee:

- Any residential/nonresidential owners who have paid storm water user fees, and who

believe the Single Family Unit (SFU) component of his/her storm water user fee to be incorrect, may submit an adjustment request on a form supplied by the Director of Public Works or designee. Storm Water Management Form No. 1 is for residential SFU adjustments and Storm Water Management Form No. 2 is for nonresidential SFU adjustments.

- The first step in the adjustment process will be a review of the City's calculation of the impervious area. If resolution is not achieved, the City may request the customer to provide supplemental information to the Director of Public Works including, but not limited to, survey data prepared by a Registered Land Surveyor (R.L.S.) that represents the amount of impervious area and compacted gravel area on a parcel and/or engineering reports prepared by registered Professional Engineer (P.E.). Failure to provide such information may result in the denial of the adjustment request.

- The Director of Public Works shall respond in writing to all adjustment requests. The response shall provide an explanation of adjustment approval or denial as well as requests for additional information.

2.1.1 Additional Storm Water Fee Adjustments (Non-Residential Only)

In addition to the requirements presented above, adjustments may also be given when an owner meets any of the following requirements:

- Owner demonstrates rainfall that occurs on an impervious area does not generate runoff (has no outlet), is completely watertight, and has at least 18 inches of freeboard. This adjustment is for unusual structures, such as swimming pools, material storage areas, etc. For these specific cases, a customer's SFUs will be adjusted by removing from the SFU calculation the amount of impervious area that does not generate runoff.

- Owner demonstrates that on-site gravel is not compacted, not used for vehicular traffic, and not impervious. The City may grant adjustments for non-compacted gravel areas used for landscaping or other purposes. The City considers all compacted gravel areas (drives, storage areas, etc.) as impervious areas, and as such, no adjustment will be granted. The Director of Public Works will make the decision regarding the intended purpose of gravel areas and the degree of imperviousness.

2.2 User Fee Credits

Nonresidential customers and private property POAs may qualify for user fee credits when they can demonstrate that their existing or proposed storm water facilities provide the City with a savings of cost or other benefit(s) that the City otherwise would incur as part of their efforts to manage storm water. The amount of reduction will be determined by the City on a case-by-case basis.

2.2.1 Restrictions

a. No public or private property shall receive credit to offset fees for any condition or activity unrelated to the City's cost of providing storm water management services.
b. No credit will be applied to any parcel that reduces the fee to an amount less than one Single Family Unit (SFU) fee.

c. Credits will not apply to Storm Water Pollution Prevention Plan (SWPPP) Review and Inspection fees attributable to new development or redevelopment projects.
d. Any BMP or portion(s) of the storm water management within a permanent storm drainage easement maintained by the government (municipality, city or state), shall not be eligible for a fee credit.
e. Credit shall only be given to the property owner of record.

2.2.2 Terms

a. Credits will only be applied if requirements outlined in this Manual are met, including, but not limited to: completion of on-going maintenance, guaranteed right-of-entry for inspections and submittal of annual self-reports.
b. Credits will be defined as percent (%) reductions applied as a credit adjustment to the fee calculation equation.
c. Credits are additive for each credit category as described in Sections 2.2.3 – 2.2.8.
d. As long as the BMPs are functioning as approved (as demonstrated by self-certification reports and City inspections), the credit will be applied to the fee. If the approved practice is not functioning as approved or is terminated, the credit will be cancelled and the fee will return to the baseline calculation. Once the credit has been cancelled, a customer may not reapply for credit until the deficiency has been corrected, as determined by City inspection. (See Section 5 for more details).
e. Credits will be applied retroactively for the first fourteen (14) months of the fee program, and from the date of implementation of a change to their existing storm water facilities for all applications after the initial fourteen (14) month period.

2.2.3 Option 1. Integrated Non-Structural BMP Program Credit

Credits may be issued for a site with ongoing implementation of an integrated suite of fundamental non-structural BMPs that will help the City meets its permit objectives. To receive a 10% Credit adjustment as applied to the fee calculation equation, documentation must be provided to verify that 6 of the 9 following BMPs have been addressed. All applications should address the minimum standards discussed in the manual and will be eligible for credits based on a case by case review of the credit application submittal.

BMP1:	Educational Program
BMP2:	On-Site Refuse Control Program
BMP3:	On-Site Storm Water System Maintenance and Cleaning Program
BMP4:	Paved Area Sweeping Program
BMP5:	Used Motor Oil Recycling Program
BMP6:	Sanitary Sewer/Storm Drain Cross-Connection Inventory
BMP7:	Landscaping for Run-Off Rate Control and Water Quality
BMP8:	Storm Drain Stenciling Program
BMP9:	Designated Vehicle Washing Area

Upon receipt of completed Storm Water Credit Application, application approval, and satisfactory on-site inspection to insure that all criteria are being met, credit will be applied. All requests will be reviewed on an individual basis with findings of the review transmitted back to

the customer within six (6) months during the first year or within sixty (60) days each additional year of receipt of a completed application.

2.2.3.1 Educational Program

Nonresidential customers who wish to receive fee credit for educating employees in the area of water quality awareness and protection must address the following minimum standards:

a. Devote fifteen minutes per quarter (or an hour annually) to educating applicable employees about water quality awareness and protection. Additionally, provide basic storm water management information to new employees. Organizations will be required to submit programs or agendas to the City for environmental education sessions that will include information concerning number of attendees, time(s), place(s), and topic(s) covered during each session along with confirmation that a 50% applicable employee participation goal was met. Pre- and post-session surveys are recommended. Topics must rotate on at least an annual basis.
b. Post storm water and water quality-specific educational information obtained from the City, State, or Federal environmental agencies, or from any other reputable educational resource center in employee frequented areas. Information posted must be clearly visible. Information topics must rotate on at least an annual basis. Copies of posted materials must be provided to the City.
c. Distribute storm water and water quality-specific literature obtained from the City, State, or Federal environmental agencies, or any other reputable educational resource center to all employees on a quarterly basis and provide copies to the City with the annual self-report. Literature topics must rotate on at least an annual basis.
d. All materials to be used in presentations must be reviewed/approved by the City before use in this program.
e. Demonstrate compliance with the education requirements of NPDES permits.

Nonresidential customers who wish to receive fee credit for educating the City regional customer base in the area of water quality awareness and protection must agree to meet the following minimum standards:

a. Disseminate storm water and water quality-specific information obtained from the City, State or Federal environmental agencies, or any other reputable educational resource center to customers on a quarterly basis using high traffic area kiosks, advertised special events, customer mailings, product label advertisements, public service announcements, ads, educational curricula, or other mass distribution techniques. Information topics must rotate on at least an annual basis. Copies of disseminated materials must be provided to the City along with estimates of the number of customers reached in each annual self-report.
b. All materials to be used in presentations must be reviewed/approved by the City before use in this program.

2.2.3.2 On-Site Refuse Control Program

In order to receive credit for the On-Site Refuse Control Program, the following minimum criteria must be address:

a. Identify or develop the organization's on-site refuse control plan and submit a copy to the City.
b. Initiate and maintain a solid waste-recycling program.
c. Keep refuse containers covered to eliminate exposure to wind, rain, and snow and where possible, place refuse containers in areas that do not drain to storm drains.

2.2.3.3 On-Site Storm Water System Maintenance and Cleaning Program

In order to receive credit for the On-Site Storm Water System Maintenance and Cleaning Program, a detailed management plan for maintaining on-site (non-public right-of-way) storm water structures must be submitted along with documentation that the planned activities were completed. At a minimum, the management plan must address the following structures, where applicable:

a. Building rain gutters/downspouts – must be directed to vegetated areas wherever possible and cleaned at least annually.
b. Catch basins – must be cleaned of litter, debris, and sediment at least once per year.
c. Storm water outfalls to private ditches, ravines, or creeks on private land must be cleaned at least once per year.
d. On-site drainage ditches or channels must be cleaned of any litter and debris and obstructive vegetation should be trimmed at least once per year.

2.2.3.4 Paved Area Sweeping Program

In order to receive credit for the Paved Area Sweeping Program, the following minimum criteria must be address:

a. Submit a detailed paved area sweeping plan to include definition of areas to be swept, frequency of sweeping (a minimum of twice per month), debris disposal method, and type of sweeper used.

b. Provide documentation of plan implementation, such as copies of paid invoices or employee timesheets, or a certification of work accomplished prepared and signed by a company official.

2.2.3.5 Used Motor Oil Recycling Program

In order to receive credit for the Used Motor Oil Recycling Program, the following minimum criteria must be addressed:

a. Provide documentation to confirm delivery of used motor oil to a used oil recycling site (i.e., waste oil generated on-site by the property owner).
b. Display the City's current list of used oil recycling sites in clearly visible and publicly frequented locations.

2.2.3.6 Sanitary Sewer/Storm Drain Cross-Connection Inventory Program

In order to receive credit for the Sanitary Sewer/Storm Drain Cross-Connection Inventory Program, the following minimum criteria must be addressed:

a. Conduct a visual building and grounds survey to identify and inventory the locations of all sanitary and storm drain connection points.
b. Provide building and site plans to the City that document the locations of all sanitary sewer and storm drain connection points and sanitary and storm drain line locations on a parcel of property.
c. If instances are found where sanitary sewage plumbing is connected to a storm drain, the cross connection must be eliminated within thirty (30) days.
d. If any discharges are in question, the owner should contact the City to determine if elimination for the discharge is required.

2.2.3.7 Landscaping for Run-Off Rate Control and Water Quality Program

In order to receive credit for the Landscaping and Run-Off Rate Control and Water Quality Program, the following minimum criteria must be addressed:

a. Develop a landscape maintenance plan for properties with landscaped areas, utilizing lawn and garden practices that reduce storm water run-off rates and protect water quality, including, but not limited to, the following recommended practices:

    i. Unless otherwise indicated by current soil tests, use phosphorus free fertilizer.
    ii. Apply all yard and garden chemicals sparingly, using the correct rates and recommended times, and not before a rainstorm.
    iii. Direct sprinklers to vegetated areas and not overlap onto impervious surfaces.
    iv. Where turf is considered necessary, maintain it by mowing grass to a height of 2-3". If necessary, seed in the spring and fall, and aerate and de-thatch in the fall. Leave grass clippings on the lawn as a natural fertilizer.
    v. Select hardy plants most suited to this climate and, where possible, reduce the amount of maintained turf and increase naturalized areas.
    vi. Mulch flowerbeds, shrubs and trees to retain water on-site.
    vii. Keep lawn and garden chemicals, garden debris, lawn clippings, and leaves off hard surfaces.

If appropriate to site conditions, the following practices are also recommended:

    viii. Landscapes should be designed to eliminate or at least minimize directly-connected impervious areas.
    ix. Maintain a 15' to 25' filter strip of tall grass or plantings along water bodies.
    x. Plant rain gardens in depressions that otherwise have standing water or receive roof run-off.

b. Provide a copy of the landscape management plan to the City along with documentation of employee training for landscape management or landscape contracts that include the above provisions.

Nonresidential customers that provide services above and beyond the basic Landscape

Program described above may be eligible for additional Credit. The City will evaluate requests for additional Credit on a case-by-case basis.

2.2.3.8 Storm Drain Stenciling Program

In order to receive credit for the Storm Drain Stenciling Program, the following minimum criteria must be addressed:

a. The City will provide the stencils with instructions, as necessary, to any owner/group interested in providing the labor.
b. Post decals or stencil all storm drain inlets with information identifying that it drains to a local water resource. For example, "drains to river" or "drains to creek".
c. Provide the City with number and location of storm drains on subject parcel.
d. Provide the City with plan for maintaining stencils/decals.

2.2.3.9 Designated Vehicle Washing Area

In order to receive credit for the Designated Vehicle and/or Equipment Washing Area, the following minimum criteria must be addressed:

a. Provide area for vehicles/equipment to be washed away from storm water drains and water resources.
b. Use environmentally sensitive cleaning materials.
c. Post location of vehicle/equipment washing area.
d. Provide the City with plan for location of vehicle washing area.

2.2.4 Option 2. NPDES Industrial Storm Water Permit Credit

The Tennessee Department of Environment and Conservation, on behalf of the USEPA, requires certain types of industry to obtain and comply with an NPDES Industrial Storm Water Permit to manage and monitor storm water runoff from industrial sites. When an NPDES Storm Water Permit issued to a nonresidential customer requires the specified industry to conduct water quality monitoring, they may be eligible for a maximum of an additional 5% Credit, if:

a. Permit required water quality testing results are consistently below their permit required discharge limits during each sampling event,
b. Copies of the water quality test results are provided to the City, and
c. Industry is consistently in substantial compliance with all permit requirements.

2.2.5 Option 3. Other Non-Structural BMP Credit

Nonresidential customers seeking a credit may request unique opportunities or approaches to improving water quality. For instance, a nonresidential customer may also be an NPDES MS4 permittee that must implement a Storm Water Pollution Prevention Program for its facility. Another example might be a retail outlet that provides "Park and Ride" space to encourage use of the transit system, thereby minimizing the growth of impervious area by reducing the need for additional parking lots and travel lanes on roadways. The City will review and evaluate these types of unique requests on a case-by-case basis to determine the Credit value for a site to which the BMP is being applied. Maximum Credit for this category is 5%.

2.2.6 Option 4. Education Credit

Those schools, public or private, wishing to receive fee credit for educating students and employees in the area of water quality awareness and protection must address the following minimum standards:

a. Devote two hours per half (four hours annually) to educating one grade level of students (or split between two grade levels) about water quality awareness and protection. Educational institutions will be required to submit programs or agendas to the City for environmental education sessions that will include information concerning number of attendees, time(s), place(s), and topic(s) covered during each session. The City will assist with providing materials for the education program. Pre- and post-session surveys are recommended. Topics must rotate on at least an annual basis, or become part of the curriculum for the same grade level each year.
b. Devote fifteen minutes per quarter (or an hour annually) to educating employees about water quality awareness and protection. Additionally, provide basic storm water management information to new employees. Topics must rotate on at least an annual basis.
c. Post storm water and water quality-specific educational information obtained from the City, State, or Federal environmental agencies, or from any other reputable educational resource center in student and employee frequented areas. Information posted must be clearly visible. Topics must rotate on at least an annual basis. Provide copies of posted materials to the City.
d. Distribute storm water and water quality-specific literature obtained from the City, State, or Federal environmental agencies, or any other reputable educational resource center to target students and all employees on an annual basis and provide copies to the City with the annual self-report. Topics must rotate on at least an annual basis.

Maximum credit for this category is 5%.

2.2.7 Option 5. Storm Water Quality Control Structural BMP Credit

BMPs identified in the City of Memphis and Shelby County Storm Water Management Manual will be eligible for a maximum fee credit of 15% if flows generated on-site and from upstream areas greater than 0.5 sq. mi. are directed through the BMP and meet or exceed the design requirements as referenced in the City of Memphis and Shelby County Storm Water Management Manual. This Credit will be based upon hydrologic data, water quality data, design specifications, and other pertinent data supplied by qualified, licensed professionals on behalf of property owners. Credits for on-site storm water facilities shall be generally proportional to the benefit that such systems have on complementing or enhancing the water quality benefit to the City's storm water management system. In order to receive credit, property access, adequate and routine facility maintenance, and self-reporting must be provided by the property owner to the City to verify that the BMP structure is providing its intended benefit. The actual percentage received will be determined through an evaluation of the system benefits provided at the time storm water leaves the customer's property. BMPs

may provide a single benefit or a combination of benefits, in which case credits will be additive.

The percentage of credit will be calculated using the equation shown in the Credit Application (see Appendix A), with a maximum credit of 15%. The total credit will consist of the percentage of impervious developed areas within a parcel whose flows generated on-site or from upstream areas greater than 0.5 sq. mi. are directed through a water quality BMP which meets or exceeds the standards set forth in the City of Memphis and Shelby County Storm Water Management Manual. The property owner must complete and submit data that quantifies and demonstrates the achievement of water quality goals. Customers who apply for credits must provide supporting documentation that their existing or proposed facilities are properly designed to provide pollution reduction. Structural BMPs that are eligible for credits include, but are not limited to the following:

- Vegetated Swales and Filter Strips,
- Infiltration and Percolation Basins,
- Percolation Trenches,
- Buffer Strips and Swales,
- Porous Pavement,
- Extended (Dry) Detention Basins,
- Retention (Wet) Ponds,
- Constructed Wetlands
- Media Filtration, and
- Other Storm Water Treatment Systems.

Customers requesting a water quality credit must submit documentation that their facilities meet or exceed the design requirements outlined in the current City of Memphis and Shelby County Storm Water Management Manual.

2.2.8 Option 6. Storm Water Volume Control Credit

Storm water volume control can be achieved through infiltration by two primary mechanisms:

a. Careful installation of approved structural BMPs (ex. infiltration ponds), or
b. Preservation of significant vegetated open spaces.

If flows generated on-site and from upstream areas greater than 0.5 sq. mi. are directed through the BMP or are controlled with on-site vegetated open spaces, then a site is eligible for up to a maximum of 25% credit using the equations presented in Appendix A and as based on the required storm event as referenced in the City of Memphis and Shelby County Storm Water Management Manual. Credits for storm water volume controls will be based upon hydrologic data, water quantity data, design specifications, and other pertinent data supplied by qualified, licensed professional engineers on behalf of property owners.

On-site volume control credits awarded for structural BMPs shall be generally proportional to the benefit that such systems have on complementing or enhancing the water quantity benefits to the City's storm water management system. Property access, adequate and routine facility maintenance, and self-reporting must be provided by the property owner to the City to verify that the BMP structure is providing its intended benefit in order to receive credit. The

percentage of credit received will be determined through an evaluation of the system benefits provided at the time storm water leaves the customer's property. The percentage of credit will be calculated according to the percentage of total drainage flow that does not leave the BMP, based on the required storm event as referenced in the City of Memphis and Shelby County Storm Water Management Manual. The discharge location, volume reduction, and down stream impact must be described.

Nonresidential customers having parcels with a total impervious area percentage less than 25%, that preserve vegetated open spaces (above and beyond existing landscape requirements to meet zoning regulations) and allow for storm water infiltration are eligible for a volume control credit based on the equation presented in Appendix A.

2.2.9 Fee Credit Calculation – Example 1

BMPs may provide a single benefit or a combination of benefits, in which case credits will be additive. The credit options have a maximum additive credit capacity of 50%. As an example of how a fee credit would be applied to a new request, imagine a parcel that receives the following credits:

1.	Integrated Non-Structural BMP Credit	8%	(max 10%)
2.	NPDES Industrial Storm water Permit Credit	2%	(max 5%)
3.	Other Non-Structural BMP Credit	1%	(max 5%)
4.	Education Credit	0%	(max 5%)
5.	Storm water Quality Control Structural BMP Credit	12%	(max 15%)
6.	Storm water Volume Control Credit	20%	(max 25%)
	OPTIONS 1-6 CREDIT SUBMITAL	43%	(max 50%)

To determine the example Fee, assume a $4.00 rate and the parcel has 30,500 square feet of impervious area. The baseline Fee calculation would be as follows:

$$\text{Fee} = \frac{(\text{impervious area in sq/ft.}) \times (\text{Rate})}{\text{SFU sq. ft.}}$$

$$\text{Fee} = \frac{(30{,}500)(\$4.00/\text{SFU/month}) \times 12}{3{,}147 \text{ sq. ft. (SFU)}} = \$465.21/\text{year}$$

Assuming documentation has been provided to prove that all the Program criteria described in the Manual have been and continue to be met, this example customer would receive a 43% Credit adjustment, changing the equation to:

$$\text{Fee} = \frac{(30{,}500)(\$4.00/\text{SFU/month})(1-0.43) \times 12}{3{,}147 \text{ sq. ft. (SFU)}} = \$265.17/\text{year}$$

This is a savings of $200.04 per year, for each year the program criteria are met.

2.2.10 Fee Credit Calculation – Example 2

As an example of how a fee credit would be applied, a generic parcel that exists in the City has

been selected and contains the following characteristics:

Total Site Area (acres)	300.00	
Impervious Developed Area (acres)	86.00	
Pervious Developed Area (acres)	174.00	
Dedicated Open Space (acres)	40.00	
Imperviousness of Developed Area (%)	33.00	
Upstream Drainage Area (acres)	350.00	
Anticipated Upstream Developed Area (acres)	140.00	
Total Detention Basin Area (acres)	10.00	
Total Impervious Developed Area (acres)	57.50	
Directed Through a Water Quality BMP as Referenced in the City of Memphis and Shelby County Storm Water Management Manual Actual		
Since the Total Impervious Developed Area is 86 Acres, Option 5 BMP Credit would be 67% Times 7.5% credit =		5.0%
Total Developed Areas to Structural BMP (acres)	314.00	
Required Detention Basin Volume (acres)	20.00	
Therefore, Option 6 volume control credit = 10 ac/20 ac times 12.5% =		6.3%

1.	Integrated Non-Structural BMP Credit	0%	(max 10%)
2.	NPDES Industrial Storm water Permit Credit	0%	(max 5%)
3.	Other Non-Structural BMP Credit	0%	(max 5%)
4.	Education Credit	0%	(max 5%)
5.	Storm water Quality Control Structural BMP Credit	5.0%	(max 15%)
6.	Storm water Volume Control Credit	6.3%	(max 25%)
	OPTIONS 1-6 CREDIT SUBMITAL	11.3%	(max 50%)

To determine the example Fee, assume a $4.00 rate and the parcel has 86 acres of impervious area. The baseline Fee calculation would be as follows:

$$\text{Fee} = \frac{(\text{impervious area in sq/ft.}) \times (\text{Rate})}{\text{SFU sq. ft.}}$$

$$\text{Fee} = \frac{86(43{,}560)(\$4.00/\text{SFU/month}) \times 12}{3{,}147 \text{ sq. ft. (SFU)}} = \$57{,}139/\text{year}$$

Assuming documentation has been provided to prove that all the program criteria described in the Manual have been and continue to be met, this example customer would receive a 16.3% credit adjustment, changing the equation to:

$$\text{Fee} = 86(43{,}560)(\$4.00/\text{SFU/month})(1-0.113) \times 12 = \$50{,}682/\text{year}$$

3,147 sq. ft. (SFU)

This is a savings of $6,457 per year, for each year the program criteria are met.

3.0 Application Procedures

A property owner seeking a fee credit must comply with the procedures outlined in this Manual and must submit a fee credit application (provided in Appendix A). All information necessary for the Director of Public Works to make a determination must be supplied as outlined in the Manual and the Credit Application. Failure to comply with the procedures outlined in the Manual will result in a denial of the Credit Application.

In cases requiring a hydrologic analysis, a qualified professional engineer registered in the State of Tennessee must prepare and certify the documentation provided to verify the hydrologic benefit.

4.0 Appeals

4.1 Process

Any person disagreeing with the interpretation or application of a provision in this manual, or the related laws or ordinances pertaining to Storm Water Management in the City, may appeal in writing to the Director of Public Works via the Storm Water Management Forms or other applicable appeal accompanied by plats, County Assessor's records, survey data, or other pertinent information to support the appeal. The Director of Public Works will notify all parties, in writing, of his or her decision within 90 days of receipt of any appeal.

Any person still aggrieved may appeal the Director of Public Works decision to a court of competent jurisdiction.

5.0 Enforcement Policy

The City reserves the right to review the application for accuracy and/or inspect and review documentation confirming the provision of the BMPs at any time. If, after its review or inspection, the City finds the application to be inaccurate or the projected level of service is not being provided or continued, the customer will be notified in writing and given 45 days to correct the deficiency. The property owner must provide written documentation to the Director of Public Works within 45 days of the original notice by the Director of Public Works that the BMP is being provided or continued as agreed in addition to such evidence as the Director of Public Works reasonably requires showing that the deficiency has been corrected. If, in the opinion of the Director of Public Works, the deficiency is not satisfactorily corrected, the fee credit attributable to the deficiency will be terminated on the following billing cycle and will remain in effect until the deficiency has been corrected.

Annual certification letters will be required every July 31st to document service provision for the preceding calendar year. If the letters are incomplete or are not submitted to the City by the required date, the property shall be considered to be in non-compliance with the credit program requirements. Non-compliant properties will lose the credit benefit and the fee credit

suspension will remain in effect until the completed certification letter is received with documentation that the program is being implemented as intended.

Once the credit reduction has been canceled, a customer may not reapply for that particular credit until the deficiency has been corrected, as determined by the City inspection. It will be the responsibility of the customer to prove the storm water management goals are met prior to the credit being reissued.

All structural water quality control systems that are not listed in the City of Memphis and Shelby County Storm Water Management Manual may require, at the request of the City and at no cost to the City, periodic certified laboratory water quality sampling and reporting to insure that the water quality standards are being met

Memphis Storm Water Management Department

Storm Water Credit Application

(Please Type or Print)

Check One:

□ **This is the first application for Credit for this property.**
□ **This is a reapplication for renewed Credit after a Credit suspension.**

If this is a first application, please address all questions and provide documentation that BMPs will be in place within 60 days of submitting this application. Existing BMPs will require proof of implementation, while new BMPs will require the submittal of implementation plans.

If this is a reapplication for renewed credit after a credit suspension, please complete Part I and provide all options listed in Part II that were suspended. Evidence that the deficiency resulting in the credit suspension was corrected must be attached to the reapplication.

PART I. GENERAL INFORMATION

1. Customer Contact Information:

   Name/Title _____

   Company _____

   Address _____

   Phone _____ E-mail _____

2. Property Parcel ID #(s): _____
3. Property Address/Description: _____
4. Authorized Representative (if applicable) Contact Information:

   Name/Title _____

   Address _____

   Phone _____ E-mail _____

NOTE: Please provide specific responses to the following questions, using additional pages if necessary, to provide a complete and comprehensive application.

All applications should address the minimum standards discussed in the manual and will be eligible for credits based on a case by case review of the application responses.

PART II. INDIVIDUAL CREDIT OPPORTUNITIES

Option 1. Integrated Non-Structural BMP Program Credit

Please refer to Section 2.2.3 in the Credit Manual and provide the necessary background information and documentation to prove that the following programs are in place and functioning on a continuing basis. Documentation may include such things as contracts, invoices, operating procedures, plans, maps, etc. All of the following criteria must be met to receive the 10% fee credit for this category. If any of the criteria listed below do not pertain to your non-residential property, please write "does not apply" followed by a description explaining the exception. If a representative other than the one identified under Part I is overseeing this component of the credit program, please provide the following information:

Name/Title, Address, Phone #, and e-mail address of the person responsible for coordinating non-structural BMPs, along with the time of day the person may be reached:

_____
_____
_____
_____

(BMP 1) Educational Program

1. Describe the audience(s) that will receive the water quality information, how the information will be selected and disseminated.

2. Describe where storm water and water quality-specific educational information will be posted (provide picture if possible).

(BMP 2) On-Site Refuse Control Program

1. Identify where solid waste disposal and recycling information will be posted.

2. Describe your on-site recycling program (number of collection site, types and volumes of materials recycled each year, collection frequency, recycling destination, etc.)

3. Describe how outdoor solid waste and recycling containers are protected from exposure to wind, rain, and snow and connection to storm drains.

4. Describe your refuse control plan.

(BMP 3) On-Site Storm Water System Maintenance and Cleaning Program

1. Using a site plan, identify the locations of storm water management structures located on the property, but not in the public right-of-way.

2. Define the maintenance and cleaning schedule for each of the on-Site storm water structures:

    - Rain gutters:

    - Catch basins:

    - Curbs and gutters:

    - Outfalls:

    - Other structures (describe):

(BMP 4) Paved Area Sweeping Program

1. Provide a site plan that identifies the paved area being swept, define the frequency (days and times) of paved area sweeping, and describe the type of equipment used to complete the sweeping.

2. If using a contracted firm to conduct sweeping, please indicate the contract information (company name, address, contact person, telephone number, contract number, contract length, and contract expiration date).

(BMP 5) Used Motor Oil Recycling Program

1. Is used motor oil reprocessed on-site? Yes [ ] No [ ]

2. If it is not reprocessed on-site, identify the name of the company that collects and/or recycles your used motor oil. (Provide company name, address, contact person, telephone number, contract number, contract length, and contract expiration date.)

3. Indicate the amount of used motor oil collected on-site each month.

4. Indicate where Memphis' current list of used oil recycling sites will be displayed.

(BMP 6) Sanitary Sewer/Storm Drain Cross-Connection Inventory Program

1. Using a site plan, identify the locations of all sanitary and storm drain connection points and sanitary and storm drain line locations on the property.

2. If instances are found where sanitary sewage plumbing is connected to a storm drain, identify what steps were taken to eliminate the cross connection and the date the work was completed.

(BMP 7) Landscaping for Run-Off Rate Control and Water Quality

1. Provide a copy of a landscape maintenance plan that identifies what lawn and garden practices are utilized to reduce storm water run-off rates and protect water quality, using the practices recommended in the Credit Manual as a baseline.

2. Describe the employee landscape management training plan or provide contract and contact information for firms contracted to complete landscape maintenance using the provisions in the landscape maintenance plan.

(BMP 8) Storm Drain Stenciling Program

1. Provide a copy of the decal or stencil that will be used to mark storm drains.

2. Provide a plan showing location and number of storm drains to be labeled.

3. Provide a copy of storm drain stencil maintenance plan that identifies annual inspections and maintenance for decals/stencils.

(BMP 9) Designated Vehicle Washing Area

1. Provide a plan showing the location of the proposed vehicle washing area. Plan must indicate site topography and show any existing storm drains and water courses.

BMP Selected:

BMP	Description	YES	NO
1	Educational Program		
2	On-Site Refuse Control Program		
3	On-Site Storm Water System Maintenance and Cleaning Program		
4	Paved Area Sweeping Program		
5	Used Motor Oil Recycling Program		
6	Sanitary Sewer/Storm Drain Cross-Connection Inventory Program		
7	Landscaping for Run-Off Rate Control and Water Quality Program		
8	Storm Drain Stenciling Program		
9	Designated Vehicle Washing Area		

Note: A minimum of 6 BMPs must be implemented to be eligible for credit.

For Office Use Only

Option 1. Integrated Non-Structural BMP Program Credit Awarded

_____%
(10% max)

_____
(date)

_____
(initials)

Option 2. NPDES Industrial Storm Water Permit Credit

1. Attach a copy of your NPDES Industrial Storm Water Permit.

2. Attach copies of water quality monitoring data with a comparison to the permit-required discharge limits.

3. Attach data that defines discharge volumes, rates, and frequency of discharges.

4. Describe how the permitted discharges are providing a positive impact and value that complements the City's storm water management system goals and provide any supporting documentation.

For Office Use Only

Option 2. NPDES Industrial Storm Water Permit Credit Awarded

_____
(5% max)

_____
(date)

_____
(initials)

Option 3. Other Non-Structural BMP Credit

1. Describe any additional non-structural approaches to improve water quality implemented by this customer, along with an assessment of its benefit to the City.

For Office Use Only

Option 3. Other Non-Structural BMP Credit Awarded

_____%
(5% max)

_____
(date)

_____
(initials)

Option 4. Education Credit

1. Provide copies of programs or agendas for environmental education sessions. Include information on the number of attendees, time(s), place(s), and topics covered during each session.

2. Provide planned questions for pre- and post-education surveys.

3. Provide copies of educational materials used for employees on water quality awareness and protection.

4. Provide copies of water quality-specific educational materials that will be posted. Indicate where the material will be posted.

For Office Use Only

Option 4. Education Credit Awarded

_____%
(5% max)

_____
(date)

_____
(initials)

Option 5. Storm Water Quality Control Structural BMP Credit Computation

1. Please attach the following items to show that the property meets the fee credit criteria. If applying for credit for multiple BMPs, please attach additional required sheets.

   - Site Plan(s) showing:
     - Property location with parcel boundaries
     - Impervious areas (IA)
     - Description and location of BMP(s)
     - Topography and drainage boundaries for BMPs and their associated % discharges
     - Drainage discharge locations to off-site properties (natural and constructed)

   - BMP plans and design calculations
     - Total Site Area = _____ acres
     - Impervious Developed Area = _____ acres
     - Drainage Area (DA) to Water Quality BMP = _____ acres

2. For the flow generated on-site that is routed through this BMP, calculate the Credit using the following equation:

   Credit = <u>Impervious Developed Area Treated by BMP(s)</u> X 0.075
   Total Impervious Developed Area

   = (Impervious Area Treated)/(Impervious Area) X
   (0.075 Water Quality Credit)

***All BMP(s) intended for Water Quality must meet or exceed the standards set forth in the City of Memphis and Shelby County Storm Water Management Manual. Credit up to 15% is achievable for treating, via on-site BMP(s), two or more times the total impervious developed area within a parcel from off-site sources.**

For Office Use Only

Option 5. Storm Water Quality Control Credit Awarded

_____%
(15% max)

_____
(date)

_____
(initials)

Option 6. Storm Water Volume Control Credit Computation

1. Please attach the following items to show that the property meets the fee credit criteria. If applying for credit for multiple BMPs, please attach additional required sheets.

   - Site Plan(s) showing:
     - Property location with parcel boundaries
     - Impervious areas (IA)
     - Description and location of BMP(s)
     - Topography and drainage boundaries for BMPs or open spaces and their associated % discharges
     - Drainage discharge locations to off-Site properties (natural and constructed)

   - BMP plans and design calculations
     - Total Site Area = _____ acres
     - Drainage Area (DA) to BMP = _____ acres

2. For the flow generated on-site that is routed through this BMP or open space preservation area, calculate the Fee Credit using the following equations. **NOTE: In calculating a structural BMP or open space preservation Credit under this section, the applicant may not use the same area of the parcel for calculating both Credits.**

A. Structural BMPs

i.) Summarize the key points of the site sensitivity analysis to describe potential down gradient impacts to surface or ground water from drainage captured on-site.

ii.) Calculate credit: **= <u>(Actual Capacity Volume Captured by BMP)</u>**
(Necessary Capacity Volume for the (*) required storm event)

X (0.125 Volume Control Credit)

= (Actual Volume)/(Necessary Volume) X 0.125

***As referenced in the City of Memphis and Shelby County Storm Water Management Manual. Credit up to 25% is achievable for capturing, via on-site BMP(s), two or more times the total required volume within a parcel from off-site sources.**

Structural Credit = _____%

B. Preservation of significant vegetated open spaces.

Parcel ID #	Parcel Size (acres)	% IA	Is the %IA < 25%? (circle one)	Credit Calculation = (100% - IA%) x (0.15)
			Yes or No	
			Yes or No	
			Yes or No	
			Yes or No	

Preservation Credit = _____%

For Office Use Only

Option 6. Storm Water Volume Control Credit Awarded

Structural Credit and/or Preservation Credit = _____%
(max 25%)

_____
(date)

_____
(initials)

The application packet should consist of the completed application form and a copy of all necessary documentation, including the applicable site plans that will allow for a complete review of the site and existing storm water management BMPs. Incomplete applications will not be processed.

Submit the application, plans, and calculations to:

Memphis Storm Water Management Department
125 N. Main Street, Room #620
Memphis, TN 38103

Signature of Owner **Date**

_____ _____

Signature and Seal of Licensed Professional Engineer
Providing Hydrologic Evaluation **Date**

_____ _____

Summary Credit Calculation **FOR OFFICE USE ONLY**

OPTIONS 1-6 (WITH MAXIMUM ADDITIVE CREDIT CAPACITY = 50%)

1. Integrated Non-Structural BMP Credit _____ (max 10%)
2. NPDES Industrial Storm Water Permit Credit _____ (max 5%)
3. Other Non-Structural BMP Credit _____ (max 5%)
4. Education Credit _____ (max 5%)
5. Storm Water Quality Control Structural BMP Credit _____ (max 15%)
6. Storm Water Volume Control Credit _____ (max 25%)

OPTIONS 1-6 CREDIT TOTAL _____ (max 50%)

Fee Credit Adjustment Factor = 1 - (% credit/100) = _____

NOTE: The minimum per parcel Fee = Residential Fee

_____
(date)

_____
(initials)

MEMPHIS, TENNESSEE
STORMWATER MANAGEMENT FORM NO. 1
RESIDENTIAL SFU ADJUSTMENT

DATE:

PARCEL I.D. #:

TYPE OF RESIDENTIAL UNIT (CHECK APPROPRIATE BOX):

Singe Family Small 0.58SFU Average 1.0SFU Large 1.52SFUs Apartment 0.41SFU

Townhouse 0.57SFU High Rise Apartment 0.13SFU Mobile Home 0.77SFU

REASON FOR SFU ADJUSTMENT:

Single family home, condominium, or mobile home is being billed incorrect SFUs

Townhouse unit being billed more than 0.57 SFU.

Apartment or multi-family complex is being billed more SFUs than the number of units in complex.

Number of SFUs being billed: _____
Number of Units in complex: _____

Other, explain

APPLICANT'S SIGNATURE:

APPLICATION REVIEWED BY:

APPLICATION APPROVED: Yes No

COMMENTS:

_____

_____

City of Memphis Stormwater Bureau
125 N. Main Street, Room # 620
Memphis, TN 38103
Phone: 901-576-6720

MEMPHIS, TENNESSEE
STORMWATER MANAGEMENT FORM NO. 2
NON-RESIDENTIAL SFU ADJUSTMENT

DATE:

PROPERTY ADDRESS:

PARCEL I.D. #:

TYPE OF DEVELOPMENT:

PARCEL AREA (square feet):

BILLED NUMBER of SFUs:

REASON FOR SFU ADJUSTMENT:

CONDITION 1
Incorrect amount of impervious area

CONDITION 2
Gravel areas not used for regular vehicular traffic (ingress/egress or parking) calculated as impervious area on utility bill or incorrect runoff factor

Other, explain:

_____

_____

If Condition 1 is checked, complete the following:	If Condition 2 is checked, complete the following:
Property Impervious Area _____ (sq ft)	Non-vehicular Gravel Area _____ (sq ft)
Revised Number of SFUS[1] _____	Alternate Runoff Factor _____
	Revised Number of SFUS[2] _____

APPLICANT'S SIGNATURE:

APPLICATION REVIEWED BY: DATE:

APPLICATION APPROVED: Yes No

CONDITIONS OF APPROVAL OR REASON FOR DENIAL AND COMMENTS:

[1] Revised number of SFUs = Property's impervious area divided by 3147 sq. ft.
[2] Revised number of SFUs = Billed number of SFUs – (Non-vehicular gravel area divided by 3147 sq. ft.)

City of Memphis Stormwater Bureau
125 N. Main Street, Room # 620
Memphis, TN 38103
Phone: 901-576-6720

MEMPHIS, TENNESSEE
STORMWATER MANAGEMENT FORM NO. 3
NOTICE OF VIOLATION

TO: _____

ADDRESS: _____

_____

_____

DATE: _____

Memphis has found that the condition(s) marked below,

Drainage facility or its construction is contrary to, or in violation of, approved plans.

Drainage facility or plans are unacceptable.

Drainage facility presents an unsafe or dangerous condition.

Exists at the following location:

_____

_____

_____

_____

The work which does not conform to City law, regulation, policy or approved plans is:

_____

_____

_____

_____

This work must be corrected to conform to City law, regulation, policy or approved plans within _____ days of receipt of this notice, or all work at the above location will be stopped by the City. The person who may be contacted (between the hours of 8:30 a.m. and 5:00 p.m.) at the City of Memphis regarding this notice is

City of Memphis Stormwater Bureau
125 N. Main Street, Room # 620
Memphis, TN 38103
Phone: 901-576-6720

MEMPHIS, TENNESSEE
STORMWATER MANAGEMENT FORM NO. 4
CESSATION OF WORK NOTICE

TO: _____

ADDRESS: _____

_____

_____

DATE: _____

Memphis issued a Notice of Violation to you on _____ which stated that drainage facility related work did not conform to City law, regulation, policy or approved plans and that the related work must be corrected within _____ days. The work stated in the Notice of Violation has not been corrected to date and hence the City is ordering all work to cease at the location given below:

Location where work is to cease:

_____

_____

_____

_____

The person who may be contacted (between the hours of 8:30 a.m. and 5:00 p.m.) at the City of Memphis regarding this notice is

City of Memphis Stormwater Bureau
125 N. Main Street, Room # 620
Memphis, TN 38103
Phone: 901-576-6720